*USAREUR Regulation 385-55

Safety

Prevention of Motor Vehicle Accidents

26 January 2000

***This regulation supersedes USAREUR Regulation 385-55, 30 August 1990.**

For the Commander:

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Summary. This revision--

Implements a new safety equipment requirement (para 3-14d).

Updates referenced publications (app A).

Applicability. This regulation applies to members of the Army in Europe.

Supplementation. Commanders will not supplement this regulation without Commanding General, USAREUR/7A (AEAGA-S), approval.

Forms. This regulation prescribes AE Form 385-55A. USAREUR and higher-level forms (printed and electronic) are available through the USAREUR Publications System at *http://upubs.army.mil.*

Suggested Improvements. The proponent of this regulation is the Office of the Deputy Chief of Staff, Personnel, HQ USAREUR/7A (AEAGA-S, 370-7751/8124). Users may send comments and suggested improvements to this publication on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to the Commander, USAREUR/7A, ATTN: AEAGA-S, Unit 29351, APO AE 09014.

Distribution. This regulation is available only in the Electronic Library of USAREUR Publications and AE Forms. The policy and procedures in this regulation apply down to battalion level.

CONTENTS

CHAPTER 1
INTRODUCTION

1-1. PURPOSE
This regulation:

a. Establishes responsibilities and procedures for USAREUR motor vehicle accident prevention efforts.

b. Establishes senior occupant responsibilities.

c. Provides an outline for conducting a winter driving orientation.

d. Lists USAREUR safe driving awards.

e. Provides tracked vehicle safety guidelines.

f. Provides criteria for built-up vehicles.

g. Establishes the USAREUR Military Vehicle Conspicuity Program.

1-2. REFERENCES
Appendix A lists references.

1-3. EXPLANATION OF ABBREVIATIONS
Use the alphabetical glossary at the left side of the screen to find definitinos of abbreviations.

1-4. REGULATION MAINTENANCE
The Safety Division, Office of the Deputy Chief of Staff, Personnel (ODCSPER), HQ USAREUR/7A, is responsible for maintaining this regulation.

1-5. OBJECTIVES

a. The Army motor vehicle (AMV) safety objective is to provide information and guidance to operators of AMVs, Army combat vehicles (ACVs), and materials handling equipment (MHE). This information and guidance will enable operators to transport personnel and property with the least possible risk.

b. The privately owned vehicle (POV) safety objective is to provide licensed personnel with information and guidance to reduce the risk of death or injury from POV accidents.

1-6. FUNDING
Commanders will program funds to implement this regulation into annual budget requests.

CHAPTER 2
RESPONSIBILITIES

2-1. COMMANDERS
Commanders at all levels will--

a. Ensure the senior occupant of a military vehicle is aware of and satisfactorily discharges his or her responsibilities (app B).

b. Prescribe and enforce procedures for the safe operation of AMVs, ACVs, MHE, and POVs on and off Army installations.

c. Ensure vehicle operations and maintenance are carried out according to Army regulations and technical manuals (TMs).

d. Collect, analyze, and evaluate motor vehicle exposure and accident data to identify where accident prevention countermeasures must be directed.

e. Supervise drivers.

f. Develop and administer training, education, and motivation programs for AMV and POV drivers.

2-2. ASG COMMANDERS
Area support group (ASG) commanders will conduct driver orientation for POV and AMV license applicants as a prerequisite to driver testing and licensing. USAREUR driver testing stations will not accept applications from soldiers, U.S. civilian employees, or family members without proof of driver orientation attendance.

2-3. DEPUTY CHIEF OF STAFF, PERSONNEL, USAREUR
The Deputy Chief of Staff, Personnel (DCSPER), USAREUR, will--

a. Develop USAREUR policy for operating motor vehicles safely.

b. Develop data analysis and countermeasure programs to support accident prevention efforts for motor vehicles.

c. Monitor the USAREUR Driver Awards Program.

d. Integrate motor vehicle safety issues in regulations developed by other HQ USAREUR/7A staff offices.

CHAPTER 3
PREVENTION OF ARMY MOTOR VEHICLE ACCIDENTS

SECTION I
PRODUCING SAFE DRIVER BEHAVIOR

3-1. GENERAL
Accidents drain resources and hinder mission accomplishment. Commanders will establish and conduct aggressive motor vehicle safety programs at all levels to prevent loss of personnel and equipment. Appendix C provides motor vehicle accident prevention measures.

3-2. DRIVER SELECTION

a. Drivers will be selected, trained, tested, and licensed according to AR 600-55 and USAREUR Supplement 1, USAREUR Regulation 190-1, FM 21-17, and FM 55-30.

b. Commanders will review the records of prospective operators and personally interview them before operators are licensed to operate AMVs. Operators must demonstrate the correct ability, judgment, and behavior to be competent drivers.

c. Drivers who transport hazardous materials must be certified as required by USAREUR Regulation 55-4.

d. Persons assigned to operate buses will be not less than 21 years old.

(1) A commander may detail a properly trained and licensed onduty soldier who is under 21 years old to operate a bus to transport other military personnel.

(2) Soldiers less than 21 years old, on or off duty, will not transport family members or other civilians. Commanders will ensure that each bus driver is screened, trained, road tested, and properly licensed. Soldiers will operate only those types of passenger buses that they are especially licensed to operate.

3-3. DRIVER TRAINING

a. Applicants for AE Form 190-1F (Private Operators License/The United States Forces in Germany) and OF Form 346 will attend driver orientation (para 2-2) as a prerequisite to testing and licensing. Attendance is mandatory for all applicants, including U.S. civilians and family members, even if applicants have previously been stationed in USAREUR.

b. Commanders will ensure topics are presented to enable POV operators to improve driving skills and learn about changes in procedures (USAREUR Pam 190-34).

c. Winter driving training will be conducted each year during October and November only for initial issue of licenses. OF 346 and DA Form 348 of applications and licensed operators will be annotated to indicate training was performed. Appendix D provides guidance for conducting the winter driving training.

d. Driver instruction will include safety aspects of maintenance duties.

3-4. INVESTIGATING AND REPORTING ACCIDENTS

a. Commanders will:

(1) Investigate and report AMV accidents. The local provost marshal, criminal investigation division, and safety office personnel will coordinate to ensure accident reports are complete and to avoid duplication of effort.

(2) Conduct a collateral investigation for POV accidents as required by AR 385-40, paragraph 1-7.

(3) Conduct a centralized accident investigation, ground (CAIG), for onduty class A and B accidents.

b. Commanders responsible for motor vehicle operations will ensure:

(1) Investigative procedures detail human errors, management or supervisory errors, equipment failures, and environmental factors causing or contributing to the accident. As an aid to AMV accident investigation, SF Form 91 (Operator Report of Motor Vehicle Accident) will be available to drivers.

(2) System defects causing or contributing to errors are identified.

(3) Nonuse or failure of installed restraint systems contributing to Army personnel injury in AMV accidents are identified.

(4) In class A and B accidents, Army medical authorities determine whether use of alcohol or drugs contributed to the accident (AR 385-40).

c. Commanders will prepare reports according to AR 385-40, and (if an AMV accident is caused by design or component failure) as required by DA Pamphlet 738-750.

3-5. MOTIVATING SAFE PERFORMANCE

a. Commanders will:

(1) Normally assign a designated driver and an alternate driver to vehicles.

(2) Recognize vehicle operators and units each year for maintaining outstanding safe driving performance.

(3) Ensure awards and badges issued to drivers are annotated in section III of DA Form 348. Incentives for safe driving performance include but are not limited to:

(a) The Driver and Mechanic Badge for military and civilian personnel (AR 600-8-22).

(b) Recognition for suggestions, superior accomplishments, and honorary awards (AR 672-74), related to AMV operation.

(4) Recognize company-level units that drive 1 fiscal year without a conviction of driving an AMV or POV while intoxicated. Commanders will prepare requests for the USAREUR Unit Safe Driving Award according to appendix E.

b. Supervisors of AMV operations will:

(1) Ensure personnel are trained, qualified, and properly licensed according to USAREUR Supplement 1 to AR 600-55 before being allowed to operate vehicles.

(2) Set clear standards of performance to ensure continuity, safety, and consistency of vehicle operations. Drivers must be aware of and understand their responsibilities.

(3) Assess driver performance periodically and use incentives to reward drivers with good driving records.

3-6. SAFE DRIVING

a. Commanders will carry out a risk assessment of each wheeled and tracked vehicle mission before starting the mission. The assessment will focus on:

(1) The vehicle operator's experience.

(2) The vehicle operator's training and rest.

(3) The availability of assistant drivers.

(4) The expected season and other environmental factors (for example, rain, snow, mud, dust).

(5) The expected physical factors (such as times, routes, rest areas, and other driving difficulties that may occur).

b. The following guidance applies to wheeled and tracked vehicle nontactical operations:

(1) Assistant Driver Scheduling Guide. If more than 10 hours are needed to complete operations, commanders will assign a qualified assistant driver to each vehicle. The unit level chain of command will develop, approve, and enforce a unit assistant driver scheduling policy. In addition to the 10-hour rule above, commanders should assign assistant drivers when:

(a) More than 6 driving hours are required to accomplish the mission during any 24-hour period.

(b) More than 4 hours of the mission are expected to be during darkness.

(c) The need to wear mission-oriented protective posture (MOPP) equipment is anticipated.

(d) Travel over unfamiliar terrain will require detailed en route navigation.

(e) Hazardous cargo will be transported as specified in USAREUR Regulation 55-4.

(f) Extensive use of a ground guide is anticipated.

(g) Deteriorating weather or road conditions are expected.

(h) There is a high probability of encountering hostile fire.

(i) High-value or mission-critical weapons systems or equipment is being transported.

(j) Other unusually difficult mission conditions are expected.

(k) Other factors determined through the premission risk assessment process (a above) require an assistant driver.

(2) Crew Rest Standards. Crew rest standards in AR 385-55 will not be exceeded. The unit level chain of command will develop, approve, and enforce a unit crew rest policy (sleep plan). The following guidelines are provided for use in developing unit crew rest policy:

(a) The 12-hour period preceding a prolonged work or sleep loss period should be kept as free of duties as possible and, ideally, should be spent in sleep.

(b) After 36 to 48 hours of continuous work without sleep, 6 hours (or less) of sleep is inadequate to return performance to normal levels. Recovery is generally complete after 12 hours of sleep or rest.

(c) Sleep loss of 72 to 96 hours will require more than 1 recovery night of sleep before performance recovery is complete.

(d) If a period of 36 to 48 hours of continuous work is imposed on a normal load of 8 hours a day, 12 hours of rest is sufficient for normal recovery. If the same load is imposed on a workload of 12 to 16 hours a day, it may take as much as 24 hours of rest for performance to recover.

(e) After enduring a stressful period of sleep loss and having gone to sleep, personnel will not be awakened for duty until they have obtained adequate sleep.

(f) Up to 5 days of adequate performance can be maintained by using work schedules of 2 days on and 2 days off, 4 days on and 2 days off, 4 days on and 4 days off, 6 days on and 2 days off, 6 days on and 6 days off, 8 days on and 4 days off, and 8 days on and 8 days off.

(g) Up to 14 days of adequate performance can be maintained by using work schedules of 4 days on and 4 days off and 16 days on and 8 days off.

(h) Total adaptation of biological rhythms to an atypical work and rest schedule requires, on the average, 3 to 4 weeks.

(i) Sleep between the hours of 2400 and 0600 or 0600 to 1200 is more restorative than sleep obtained between 1200 and 2400.

(j) Generally, under tactical conditions, maintenance of 4 hours of uninterrupted sleep in each 24-hour period will provide minimum satisfactory performance.

c. Drivers will not use headphones or earphones while operating or riding in AMVs. This does not negate the requirement for wearing hearing protection under certain conditions (Technical Bulletin (TB) Med 501).

d. Drivers, senior occupants, or assistant drivers will not drink intoxicating beverages for at least 8 hours before scheduled duty or during their normal duty shift.

e. Drivers will not eat, smoke, or drink while the vehicle is in motion. Drivers and occupants will not smoke while in the vehicle.

f. Drivers will not wear MOPP masks while operating a vehicle on public roads. When approved by a battalion commander or above, supervised driver training may be conducted at local driver training sites on U.S.-controlled property with drivers wearing MOPP masks. The driver training supervisor will remain unmasked at all times.

g. Commanders will enforce the following safety guidelines:

(1) Glass areas on AMVs will not be discolored or cracked and will not have posters, placards, stickers, or nontransparent materials that impair the driver's vision or create a hazard.

(2) Operators of wheeled and tracked vehicles and trucks with trailers will use ground guides when operating in confined spaces and when backing up. Wheeled and tracked vehicle parks or bivouac areas where troops are sleeping are of special concern. Blackout operations in such areas are prohibited. Ground guides will use the hand-and-arm signals in FM 21-60. Guides will remain clear of the vehicle path and will be visible to the driver at all times during the movement. If the driver loses sight of the guide, he or she will stop immediately. Appendix F provides additional information on tracked vehicle safety.

(3) Operators of vehicles equipped with radio antennas will be given special instruction on the hazards of fire and electrocution from antennas contacting overhead power lines. Antennas on tracked and wheeled vehicles will be tied down to a height between 8 feet (2.5 meters) and 13 feet (4 meters). The ends of the antennas will be blunted with an antenna tip assembly (antenna ball, national stock number (NSN) 5920-00-437-2353; and tiedown kit, NSN 5820- 00-908-6416).

(4) Antennas will be removed and stored inside the vehicle before the vehicle enters a rail loading site and is loaded onto a railcar. Antennas will not be reinstalled until unloading has been completed and the vehicle is clear of overhead powerlines and out of the rail loading site.

(5) Antennas will be clipped in and under the antenna retaining clip when vehicles operate in garrison or over improved roads. Antennas will be snapped into the tiedown assembly in unimproved areas.

h. Bus drivers of military buses will ensure that--

(1) All seats are occupied before allowing additional passengers to stand.

(2) The total number standing does not exceed half the designated seating capacity of the bus.

(3) Those standing do not interfere with the driver's vision.

SECTION II
VEHICLE SAFETY STANDARDS

3-7. GENERAL

a. Before vehicle dispatch, commanders or their representatives will ensure drivers:

(1) Perform appropriate preventive maintenance checks and services (PMCS) on vehicles before use.

(2) Are briefed to perform checks at each rest halt and after operation to prevent the following conditions:

(a) Improper functioning or adjustment of steering, lights, windshield wipers, horns, warning signals, side or rearview mirrors, restraint systems, and other safety devices.

(b) Windshields, windows, mirrors, lights, reflectors, or other safety devices that are broken, cracked, discolored, or covered with frost, ice, snow, dirt, mud, or grime.

(c) Defective, inoperable, or out-of-adjustment parking brakes. Vehicles with defective brakes, including parking brakes, will be not-mission-capable (NMC) until repaired. When vehicles with brake problems are moved for maintenance, they will be towed with a tow bar.

(d) Vehicles that have a gasoline, brake fluid, or class III diesel leak. Leaky vehicles will be NMC until repaired.

(e) Any condition likely to cause injuries or damage because of component failure. Examples include tires that are excessively worn or deeply cut or have exposed cords; cracked wheel hubs; worn or frayed tiedown straps or personnel restraint systems; torn sheet metal with exposed sharp edges; damaged or missing exhaust pipe shields; leaks from exhaust systems; loose or missing wheelnuts; and spare wheels improperly secured.

(f) Improperly secured loads.

(g) Vehicle loaded beyond design load limits.

(3) Have warning triangles and first aid kits in their vehicles.

b. Operators are responsible for bringing any vehicle defect to the supervisor's attention.

c. No vehicle will be operated with a condition described above (a(2)(a) thru (g)) unless the unit commander gives written authorization.

3-8. MOTOR VEHICLE SAFETY STANDARDS

a. Commercial-type, passenger-carrying AMVs built to manufacturers' specifications and purchased, leased, or rented by the Army will meet Federal motor vehicle safety standards.

b. Foreign-built commercial vehicles purchased for use outside the continental United States will meet applicable safety requirements of the country where they are registered or assigned.

c. If the normal structure of an Army vehicle will not protect the driver and passengers during rollover, the vehicle will be equipped with a rollover protective structure (ROPS) that conforms to Society of Automotive Engineers standards. Any waiver will be obtained from the U.S. Army Safety Center through the Commander, USAREUR/7A, ATTN: AEAGA-S, Unit 29351, APO AE 09014.

d. Built-up vehicles will meet the requirements in appendix G. Unit commanders who wish to use built-up vehicles will obtain permission from commanders two levels higher in the chain of command. Requests for use of built-up vehicles will include justification, a load plan (if shelves are to be installed), and drawings of installation plans (if heaters or lights are to be installed).

SECTION III
ENVIRONMENTAL FACTORS AND ROAD CONDITIONS

3-9. ADVERSE ENVIRONMENTAL CONDITIONS

a. Commanders of USAREUR major commands (USAREUR Reg 10-5, app B), ASGs, and base support battalions (BSBs) will use--

(1) Appendix I to determine road conditions.

(2) Public media to announce status of travel conditions.

b. BSB commanders will set road conditions for their geographic areas according to the guidance in this regulation, appendix I.

c. Unit commanders will assess the risks for the BSB-determined road condition (b above) and assign missions and dispatch vehicles accordingly. Commanders will--

(1) Ensure vehicles are equipped (good tires, lights, wipers, chains) and maintained to cope with expected adverse conditions.

(2) Ensure drivers know and follow established emergency procedures.

(3) Establish procedures for announcing adverse road conditions.

(4) Limit traffic to mission-essential business during adverse weather conditions.

(5) Publish unit standing operating procedures (SOPs) for operating in normal and adverse environmental conditions.

3-10. TRAFFIC CONTROL DEVICES
Commanders will comply with uniform traffic control devices (for example, stop lights) used by the host nation where the installation is located. The standards for host nation traffic devices are located at the community safety office and facility engineer office.

SECTION IV
SAFE VEHICLE OPERATIONS

3-11. FIRE PREVENTION
The following guidelines are precautions against AMV fires:

a. An AMV may be operated only if it is entirely free from gasoline leaks and class III diesel leaks. Class III diesel leaks are diesel fuel droplets that fall from the item being inspected or checked.

b. Electric lamps used to examine or repair vehicles must meet the standards of the National Electric Codes or host nation electric codes. Open flames will not be used.

c. Smoking, spark-producing devices, and open flames are prohibited:

(1) In shops, garages, or motor pool parking areas, except in areas specifically designated by authorities as smoking areas.

(2) Within 50 feet (15 meters) of vehicles loaded with flammable or combustible liquids with a flashpoint below 200°F (93°C), flammable gases, or explosives.

(3) In the presence of flammable vapors such as those present when fueling vehicles or examining or repairing engines or fuel systems. "No Smoking" signs will be posted conspicuously.

(4) By vehicle occupants at any time the engine is running.

d. When fueling vehicles, or when leaving vehicles unattended to be fueled, drivers will:

(1) Turn off the engine.

(2) Confirm the fuel shutoff switch or cable is in the off position.

(3) Put the transmission in neutral position (or park position, if automatic).

(4) Use parking brakes or chock blocks. When low temperatures prevent setting parking brakes, the wheels will be chocked firmly to prevent movement. At least one wheel will be chocked during refueling.

(5) Discontinue fueling if a lightning storm is visible.

e. Fuels, paints, lubricants, flammable cleaning solvents, rags saturated with paint or oil, and other flammable and combustible materials used in motor shops or garages will be handled as prescribed in applicable directives. Flammable and combustible waste material will be removed to a collection area outside motor shops and garages at the end of each workday.

f. Trucks loaded with combustible waste will be unloaded before being parked for the night.

g. Gasoline will never be used for any cleaning purpose. Only approved types of solvents will be used.

h. Vehicles transporting explosives will be equipped with two fire extinguishers, either two 10BC or one 10BC and one 3A40B light water (aqueous film-forming foam) fire extinguisher. Other vehicles that require fire extinguishers (using FM 10- series requirements) are:

(1) Vehicles responding to calls for assistance (for example, fire, police, and security vehicles).

(2) AMV personnel carriers with a capacity of five or more persons.

(3) Vehicles carrying valuable equipment or materials on a mission that requires special protection.

(4) Vehicles carrying flammable or combustible materials on a mission that requires limited protection.

i. To reduce the danger of fire or explosion caused by static sparks, the driver will:

(1) Make a positive bonding connection between the fuel tank truck and the source from or to which the tank truck is filled or offloaded.

(2) Ground and bond the fuel tank trucks before refueling or defueling.

3-12. PREVENTING ASPHYXIATION

The following guidelines are safety measures against asphyxiation:

a. Vehicles will be inspected to verify there are no leaks in the exhaust system.

b. Garages, shops, and other enclosed areas used for vehicles will be ventilated adequately at all times to prevent overexposure to exhaust gases from vehicle engines or space heaters.

(1) Vehicle engines will not be run in a garage or shop longer than needed to move the vehicle in or out. The only exception is if open windows or doors or ventilation systems that have been testes and approved are adequate for removing engine exhaust.

(2) Carbon monoxide detection devices will be installed in enclosed areas involved in vehicle operations.

c. Personnel will ensure there is adequate ventilation while articulating exhaust systems seal. (Articulating exhaust systems have welded and sliding joints with ball-and-socket type joints on the main exhaust tube. As the system becomes heated, the joints seal themselves. Before complete expansion, some exhaust gas escapes around the joints.)

(1) When the power train, cooling, and exhaust systems are separated from the crew by engine access panels (as in the M113 family), the operator will ensure that the panels seal properly to prevent carbon monoxide from entering the crew compartment.

(2) Commanders will ask preventive medicine activity personnel will conduct periodic tests under full working conditions to determine whether or not carbon monoxide is present.

d. Sleeping at any time in Army wheeled or tracked vehicles with the engine or heater running is prohibited. Asphyxiation may result from exhaust fumes.

e. The engine of a parked or standing vehicle will not be operated solely to warm personnel. If the engine of such a vehicle must be operated, at least two main windows will be opened completely.

f. Catalytic heaters will not be used to warm personnel in or around a vehicle.

3-13. CONVOY OPERATIONS

a. Proper planning and control of Army motor columns on public roads are required to prevent traffic congestion and accidents. Commanders will make movement plans according to USAREUR Regulation 55-1 and USAREUR major and separate command (USAREUR Reg 10-5) directives when convoy movements are smaller than those described in USAREUR Regulation 55-1.

b. Additional information on planning, operating, and controlling motor marches and convoys is in AR 600-55, FM 9-20, FM 55-30, and USAREUR Pamphlet 385-15.

c. Routes for convoys, especially for oversized vehicles, will be inspected and approved in advance. Special attention must be given to low bridges and tunnels, maximum weights allowed, overhead electric wires, narrow streets, and tight turns.

d. When convoys are to travel on public roads, commanders will place a 2 ½ -ton or larger truck as the trailing escort vehicle (TEV). When a 2 ½-ton truck is not available, commanders will use a 1-ton or larger truck. Tracked vehicles or M561 Gamma Goat vehicles will not be used as TEVs.

e. As an additional warning to civilian motorists, the lead escort vehicle in the convoy will have a sign in the front that reads "CONVOY FOLLOWS." The TEV will have a sign on the rear that reads "CONVOY AHEAD." Signs will be in English and the language of the host nation. Lettering on the sign will be black on a white background. The letters will be at least 4 inches high. The size of the sign will be governed by the size of the vehicle. Signs will not obscure lights, reflectors, placards, or vehicle conspicuity markings.

f. Vehicles will maintain the following driving intervals from each other:

(1) At least a 2-second interval during normal driving conditions.

(2) At least a 3-second interval--

(a) During inclement weather driving conditions.

(b) When transporting hazardous materials.

(3) At least a 6-second interval when driving on the autobahn.

g. Vehicles will close up at halts and be completely off the pavement and clear of intersections. Drivers will use caution when moving onto the road to resume travel. Trail vehicle personnel will post a guard with a proper warning device to alert approaching traffic. Guards may warn, but will not direct, nonmilitary traffic.

3-14. SAFETY EQUIPMENT

a. All persons operating or riding as passengers in a motor vehicle will wear seatbelts when sitting in seats with safety belts installed. No one will ride in a seat from which occupant restraints have been removed or made inoperative.

b. Vehicle commanders, drivers, and assistant drivers will wear eye protection (goggles) when combat vehicles are not equipped with a windshield or when the windshield is down. Crewmembers and passengers will wear head protection (helmets or the combat vehicle crewman (CVC) helmet) at all times while combat vehicles are being operated.

c. Trailers will be equipped with safety chains or similar devices to prevent accidents from breakaways. Trailer brakes, brake lights, tail lights, and turn signals will be in operating condition.

d. Military motor vehicles will be equipped with warning triangles, first aid kits, a reflective vest, and fire extinguishers. Commanders will publish an SOP for the use of warning triangles and ensure a copy of the SOP is carried in the vehicle.

e. Rotating or flashing blue lights will be used for emergency vehicles.

f. A 360-degree rotating amber warning light (RAWL) will be installed on repair vehicles, utility servicing vehicles, vehicles hauling oversized loads, wreckers, and other vehicles that frequently deviate from or obstruct normal traffic patterns.

g. The first and last vehicle in a convoy will be equipped with and use a RAWL (except in The Netherlands). RAWLs will be mounted so as not to be a hazard or nuisance to the driver or other drivers, and will have 360-degree visibility. If 360 degrees cannot be obtained on a RAWL, an additional RAWL may be used for this purpose. No more than two RAWLs will be used on one vehicle. Other vehicles in the convoy will use RAWLs only when directed by the convoy commander.

h. Military vehicles will be equipped with chock blocks for use when parked on inclines or while maintenance is being performed.

i. Tactical wheeled and tracked Army vehicles operating in USAREUR will be marked at the rear with retroreflective red and yellow delineator plates to reduce the chances of nighttime rear-end collisions (app H). No other retroreflective markings will be used on the rear of Army vehicles in USAREUR. Tracked vehicles operating on public roads will have a RAWL turned on.

j. Commanders are encouraged to develop and use other devices that increase the safety of operations. The installation of safety devices on motor vehicles requires approval according to AR 750-10. New safety devices will not violate host nation laws.

3-15. SAFE MOVEMENT OF PERSONNEL

a. Personnel will be transported in passenger vehicles such as sedans, station wagons, or buses. When such vehicles are not available, cargo vehicles may be used. Transportation to and from troop training or maneuver areas may be done with cargo trucks if such transportation is part of training. The only semitrailer authorized for personnel transport is the 80-passenger personnel carrier van, line item number S-74901, NSN 2330-01-090-7846. No other semitrailers are considered safe to transport personnel; their use for this purpose requires HQDA waiver. When personnel are transported in cargo truck convoys, the TEV will not be used to carry passengers.

b. When more than one person (besides the driver) is transported in a cargo truck, there must be adequate fixed seating. Occupants will be seated when the vehicle is in motion.

c. The number of passengers transported in buses or converted cargo vehicles in "over-the-road" service will be restricted to the designed seating capacity.

d. The driver, assistant driver, or senior occupant of cargo trucks transporting personnel will:

(1) Walk to the rear of the truck to ensure that the tailgate, safety device, or safety strap is in place and that all passengers are seated. After stopping, the driver will walk to the rear of the vehicle and release the safety device or lower the tailgate before permitting passengers to dismount.

(2) Warn personnel not to jump from cargo beds and to move away from traveled portions of the roadway after dismounting.

(3) Refuse to move a motor vehicle when any person outside the vehicle is in an unsafe position. An unsafe position could be standing; attempting to ride between the cab and body; hanging on the sides, running boards, or fenders; sitting on tailgates or sides of the truck; or extending arms or legs outside the truck body.

(4) Place the vehicle in first gear (park, if automatic) and set the handbrake before starting the engine.

e. Additional guidance on the safe transportation of personnel is in FM 21-305.

3-16. SAFE TACTICAL VEHICLE OPERATIONS

a. Tactical operations put special demands on vehicle operators because of adverse environmental factors (rain, snow, mud, and dust), fatigue, and blackout operations.

b. Commanders responsible for conducting tactical operations (actual or training) that involve motor vehicles and equipment will apply safety standards (for example, speed limits, passenger transportation standards, vehicle maintenance). In actual situations, deviations are allowable only when necessary to accomplish a mission. In training situations, only the commander may authorize deviations by signing the vehicle dispatch. Commanders will evaluate the significance of the assumed risk compared to the training benefit.

c. Commanders will include safety procedures in SOPs for training related to vehicle operations.

3-17. EMERGENCY SERVICES: MEDICAL AND ACCIDENT SITE CONTROL

a. Commanders will ensure there are procedures to:

(1) Detect and respond to traffic accidents or incidents promptly.

(2) Sustain and prolong life through proper first aid measures.

(3) Provide prompt medical evacuation of injured personnel to the nearest medical facility.

(4) Secure and preserve the accident site until the need for centralized accident investigation, ground (CAIG), has been determined. While this preservation must not compromise local highway safety, preservation of accident site physical evidence is essential. If the accident site cannot be secured, unit or local safety personnel will take color photographs (other than self-developing) and make measurements and diagrams before the wreckage is removed.

(5) Ensure rapid, orderly, and safe removal of accident wreckage, spills, and debris from roads. When appropriate, Army personnel will work with local authorities to remove debris safely from offpost accidents that involve Army equipment.

(a) Disabled vehicles will be moved off the roadway as far to the side as possible until they can be towed away or repaired.

(b) Disabled wheel vehicles will be towed only, per applicable technical directives. The towing vehicle operator will travel at speeds that take into consideration the size and condition of the disabled vehicle and the condition of the road and weather.

(c) In the Federal Republic of Germany (GE), wheeled vehicles that break down on the autobahn may be towed on the autobahn to the exit nearest the destination, provided traffic safety precautions are taken, and a copy of the special towing exemption issued by GE authorities is in the cab of the towing vehicle.

(d) In GE, vehicles that break down off the autobahn will not be towed onto the autobahn.

(e) A tow bar will be used. Safety devices, chains, or cables will be connected to the towing vehicle to prevent the towed vehicle from breaking loose should the tow bar fail or become disconnected. Commanders will specify safe towing speeds for vehicles in their inventory. No more than one vehicle will be towed. Standard tow bars or wreckers will be used for towing disabled vehicles. Chains, cables, or ropes will not be used for towing. RAWLs on wreckers and four-way flashers on towed vehicles will be on.

(f) Tracked vehicles that cannot be repaired and safely moved under their own power will be removed by loading onto a lowboy trailer.

(g) Recovery vehicle operators will ensure other road users are able to see turn signals and brake lights on both the towed and towing vehicles.

b. Personnel involved in a motor vehicle accident in which the disabled vehicle cannot be removed from traffic lanes of public roads will take measures to prevent further injury to personnel or further damage to equipment. As a minimum, these measures include:

(1) Activating four-way flashers.

(2) Activating RAWLs if available.

(3) Placing a warning triangle or other warning devices 300 feet (100 meters) behind the disabled vehicle.

c. Posting military guards at the site of an accident or disabled vehicle is permissible only to warn other road users of the danger ahead. Military personnel are not authorized to direct civilian traffic. (Directing means that the persons being directed must obey the guards' signals and that the guards have the authority for enforcement. Warning means to give signals in a way that is not itself an offense and without attempted enforcement.) U.S. Forces personnel may warn and protect other road users by:

(1) Contacting the nearest host nation police for assistance.

(2) Contacting the nearest military unit and requesting military police assistance and wrecker service.

(3) Attempting to slow down oncoming traffic from the side of the road by use of hand signals.

3-18. MOTOR VEHICLE OPERATIONS NEAR AIRCRAFT
The flight line safety officer or airfield manager will:

a. Give a special briefing about the driving standards around aircraft to motor vehicle drivers with an initial assignment to operate AMVs in or near aircraft operating or parking areas.

b. Give a special briefing each following year.

c. Annotate each briefing on the driver's DA Form 348 and OF Form 346. Only drivers with an annotated OF Form 346 will be admitted into aircraft areas. The briefing will contain the following restrictions, as a minimum:

(1) Personnel may approach operating aircraft only with clearance from the aircraft commander.

(2) Personnel will stow vehicle radio antennas before entering aircraft operating or parking areas.

(3) Personnel will not drive vehicles directly toward aircraft.

(4) Vehicles will maintain a minimum distance of 10 feet (3 meters). Vehicles equipped with catalytic converters will maintain a clearance of 50 feet (15 meters).

(5) Personnel will not attempt to back a vehicle into position near an aircraft alone. To back a vehicle in or around aircraft, the driver must stop the vehicle completely 20 feet from the aircraft or helicopter rotor blades, and a ground guide must direct the driver.

(6) Personnel will not leave vehicles unattended close to aircraft unless the engine is off, the transmission is placed in low (or park), the parking brake is set, and the wheels are chocked.

(7) Personnel will refuel according to FM 10-67-1.

3-19. USE OF GROUND GUIDES FOR MANEUVERING NONTACTICAL AND TACTICAL WHEELED, TRACKED, AND ENGINEER VEHICLES

a. General. This section outlines the procedures and numbers of ground guides needed to move vehicles (with or without trailers) safely for short distances in motor pools, assembly areas, and other areas.

b. Procedures for Guiding Vehicles Through Assembly Areas. Forward and rear ground guides will guide vehicles being moved through an assembly area. The forward ground guide will be positioned out of the forward path of the vehicle and not closer than 10 feet to the front of the vehicle. The rear ground guide will be positioned to maintain visual contact with the forward ground guide.

c. Ground Guides. The number of ground guides required by vehicle type are as follows:

(1) Nontactical Vehicles. If rear visibility is blocked by cargo or otherwise limited, or for a bus carrying passengers or a truck 2 1/2 tons or larger, a minimum of 1 ground guide is required.

(2) Tactical Wheeled Vehicles. If rear visibility is blocked by cargo or otherwise limited, at least:

(a) One ground guide is required for 1 1/4-ton vehicles and below.

(b) Two ground guides are required to guide tactical wheeled vehicles larger than 1 1/4-ton vehicles backward and forward. If only one ground guide is available, the vehicle may only be moved and guided forward.

NOTE: This note is applicable to tactical and nontactical wheeled vehicles only. In emergency cases where a ground guide is not available (for example, in the civilian domain), vehicle drivers will:

1. Dismount.

2. Walk completely around the vehicle to verify clearance.

3. Determine visual clear distance with a ground reference point visible from the cab of the vehicle.

4. Mount the vehicle.

5. Sound the horn.

6. Back to the preselected ground reference point.

7. Stop.

8. Repeat the process as necessary until the desired vehicle positioning is obtained.

(3) Tracked Vehicles. Two ground guides are required to guide tracked vehicles backward and forward. If only one ground guide is available, a tracked vehicle may only be moved and guided forward.

(4) Engineer Vehicles Operating at Supervised or Controlled Access Construction Sites. Before starting vehicle engines, drivers of graders, bulldozers, and other engineer vehicles will walk around the vehicles to ensure the area is free of obstructions. Ground guides are not required to back engineer equipment operating at supervised or controlled access construction sites. Drivers of engineer vehicles, however, will sound vehicle horns before backing as an SOP while operating at supervised or controlled access construction sites. Engineer vehicles operating outside of supervised or controlled access construction sites will use the standards and number of ground guides indicated above.

d. Ground Guiding Standards and Procedures.

(1) Drivers and ground guides will coordinate signals before ground guide operations. The signals to control vehicle drivers shown in FM 21-60 will be used.

(2) The driver must be able to see assigned ground guides at all times. If the driver loses sight of a ground guide, he or she will stop the vehicle.

(3) Before backing up in nontactical areas, drivers of all types of vehicles will sound their horn.

(4) Only one ground guide will provide signals to a driver.

(5) Ground guides will not walk or run backward. If ground guides are observed walking or running backward, the vehicle operator will stop and make an on-the-spot correction.

(6) Ground guides on rail cars will not stand on the same rail car as the vehicle being guided.

(7) When appropriate to the mission, ground guides will be equipped with retroreflective vest and flashlights.

CAUTION: Ground guides will not position themselves between the vehicle being guided and another object where an inadvertent engine surge or momentary loss of vehicle control could cause injury or death. Drivers of vehicles will stop their vehicles immediately if they lose sight of a ground guide or note that the guide is dangerously positioned between the vehicle and another object. Drivers of vehicles in such cases will secure their vehicle, dismount, and make an on-the-spot correction before continuing operations.

CHAPTER 4
PREVENTING POV ACCIDENTS

4-1. GENERAL

a. POV accidents in Europe most often occur while drivers are off duty and off post, away from Army supervision. Commanders must educate drivers directly through information, motivation, and guidance before drivers leave Army control.

b. Soldiers have a duty to avoid unnecessary injury to themselves by using safety devices and equipment. When a safety violation occurs, commanders should consider a full range of actions to deal with the violation. Such actions may include suspension or loss of driving privileges, additional training in the particular aspect of the violation, and revocation of AE Form 190-1F (Private Operators License/The United States Forces in Germany).

c. Accident research has shown consistently that the use of restraint systems can reduce the chance of death or serious injury in an automobile accident and can prevent injury during sudden braking. Using a restraint system can prevent accidents by helping the driver maintain control of the automobile.

4-2. POV ACCIDENT PREVENTION

Most Army personnel killed or injured in POV accidents in Europe are involved in single-vehicle accidents at night on secondary roads. Factors contributing to accidents are often excessive speed, use of alcohol or drugs, fatigue, or failure to use a restraint system. Commanders will identify other factors in accidents that apply to their communities or units and will implement their POV accident prevention programs using these factors. Programs will include the following:

a. Indoctrination. Commanders will ensure their soldiers, civilians, and family members know the main causes of Army POV accidents. Briefings should cover four-wheeled vehicles and motorcycles.

(1) Four-Wheeled Motor Vehicles. Major topics to be covered include the following:

(a) Causes of accidents (incl emotional causes).

(b) High-speed driving.

(c) How to avoid a collision with another vehicle.

(d) The effects of drugs and alcohol on driving skills.

(e) How to control fatigue when driving.

(f) Pedestrian safety precautions.

(g) A driver's view of motorcyclists.

(2) Motorcycles.

(a) In Germany, drivers are required to pass a written and performance test to obtain an AE Form 190-1F. If drivers fail the performance test, they must attend and satisfactorily complete a German driving school (Fahrschule) course at their own expense.

(b) Novice drivers in Germany who do not have a U.S. motorcycle license must attend and pass a Fahrschule driver training course before they are licensed.

(c) Motorcycle drivers outside of Germany must complete an Army-approved motorcycle safety course. The course will consist of classroom instruction, hands-on training, and a written test.

b. Safety Restraint Usage.

(1) Occupants of USAREUR registered vehicles will use a restraint system while driving or riding in a POV originally equipped with a restraint system. Removal of the restraint system from a POV does not excuse the vehicle owner or occupant from the requirement to use a restraint system.

(2) Installation commanders should:

(a) Use media (for example, daily or weekly bulletins, newspapers, bulletin boards) to publicize the restraint system requirement.

(b) Provide followup education programs to encourage continual use of restraint systems, especially by children.

(c) Conduct random gate checks for compliance and develop procedures to reward compliance and punish offenders.

c. Counseling Traffic Law Offenders. Commanders will provide professional or supervisory counseling to drivers who have been determined by competent legal authorities to be at fault in traffic accidents, or who have committed major traffic offenses. USAREUR Regulation 190-1 contains detailed requirements.

d. Enforcement. Commanders will request host nation police assistance to increase patrols on weekend nights. USAREUR Regulation 190-1 contains disciplinary and administrative actions for traffic accidents or violations.

e. Inspection and Registration of POVs. Commanders will ensure the inspection and registration requirements of USAREUR Regulation 190-1 are met.

f. Other Prevention Programs. Measures likely to be effective against POV accidents include:

(1) Implementing promotional activities, campaigns, training programs, enforcement efforts, and related programs.

(2) Emphasizing safety of personnel while traveling on pass or leave, particularly during holiday periods.

(3) Encouraging the use of public transportation.

(4) Giving safety talks during formations.

(5) Conducting visual checks of POVs, especially those 10 years or older (these vehicles are overrepresented in fatal accidents).

(6) Stressing the effects of drugs, alcohol, and fatigue on the driver's ability to operate a vehicle safely.

(7) Publicizing host nation vacation times and encouraging travel during daylight and hours of least congestion.

g. Prohibiting Headphones or Earphones. Wearing headphones or earphones seriously impairs the ability of drivers to perform safely. The use of such devices while driving on Army property is prohibited. Commanders will discourage their use off post.

APPENDIX A
REFERENCES

AR 55-355, Defense Traffic Management Regulation.

AR 58-1, Management, Acquisition, and Use of Administrative Use Motor Vehicles.

AR 190-5, Motor Vehicle Traffic Supervision.

AR 385-10, Army Safety Program.

AR 385-40, Accident Reporting and Records.

AR 385-55, Prevention of Motor Vehicle Accidents.

AR 600-55 and USAREUR Supplement 1, Motor Vehicle Driver and Equipment Operator Selection, Training, Testing, and Licensing.

AR 672-8-22, Military Awards.

AR 672-20, Incentive Awards.

AR 672-74, Army Accident Prevention Awards Program.

AR 750-10, Modification of Materiel and Issuing Safety-of-Use Messages and Commercial Vehicle Safety Recall Campaign Directive.

Common Table of Allowances 50-909, Field and Garrison Furnishings and Equipment.

DA Pamphlet 40-501, Hearing Conservation.

DA Pamphlet 738-750, Functional Users Manual for the Army Maintenance Management System.

Field Manual (FM) 9-20, Technical Escort Operations.

FM 10-67-1, Concepts and Equipment of Petroleum Operations.

FM 21-17, Driver Selection, Training and Supervision, Track Combat Vehicle.

FM 21-60, Visual Signals.

FM 21-305, Manual for the Wheeled Vehicle Driver.

FM 55-30, Army Motor Transport Units and Operations.

Technical Manual 9-2320-218-10, Operator's Manual for 1/4-Ton, 4x4, M151 Series Vehicles.

USAREUR Regulation 55-1, United States Army Motor Vehicle Operations on Public Roads.

USAREUR Regulation 55-4, Joint Transportation of Hazardous Material.

USAREUR Regulation 55-355/USNAVEUR 4600.7D/

USAFE 75-4, Joint Transportation and Traffic Management Regulation--Central Europe.

USAREUR Regulation 190-1/USNAVEUR 11240.6J/USAFE 31-202, License to Operate and Registration of Privately Owned Motor Vehicles in Germany.

USAREUR Regulation 715-2 , USAREUR Acquisition Regulation with USAREUR Acquisition Instructions (UAI)

USAREUR Pamphlet 190-34/USAFE 125-11, Drivers Handbook and Examination Manual for Germany.

USAREUR Pamphlet 385-15, Leaders Guide--Force Protection.

APPENDIX B
SENIOR OCCUPANT RESPONSIBILITIES

B-1. PURPOSE
This appendix explains the responsibilities of the senior occupant in military vehicles. The senior occupant of a military vehicle may be the operator or a passenger.

B-2. RESPONSIBILITIES

a. The senior occupant will:

(1) Be a responsible person who has exhibited mature judgment.

(2) Ensure an assistant driver is assigned when required.

(3) Verify drivers are licensed and qualified to operate the vehicles dispatched.

(4) Verify drivers have had at least 8 hours' continuous rest beforehand when combined duty (nondriving and driving) periods exceed 12 hours in any 24-hour period.

(5) Verify drivers have not consumed intoxicating beverages during the 8 hours before scheduled duty or during their normal duty shift.

(6) Ensure drivers do not operate an Army motor vehicle (AMV) more than 4 hours under adverse conditions, or 10 hours under normal conditions, in 1 day. The battalion commander must approve, in writing, driving more than 8 hours. Time for rest breaks and meals is excluded.

(7) Ensure drivers take 15-minute rest breaks every 2 hours. During these breaks, drivers will inspect their vehicles and check that equipment and cargo are secure. Drivers also will take 1-hour meal breaks.

(8) Provide additional rest periods, if needed, when adverse weather, hazardous cargo, or difficult field exercises are involved.

(9) Ensure that drivers who appear fatigued or physically, emotionally, or mentally impaired do not operate a vehicle.

(10) Ensure vehicle occupants wear seatbelts, if installed, while the vehicle is in motion.

(11) Ensure the authorized seating capacity of the vehicle is not exceeded.

(12) Ensure the driver does not eat, drink, or smoke while driving.

(13) Ensure the driver does not wear headphones or earphones while driving, except when hearing protection is required.

(14) Assist the driver in recognizing unsafe mechanical conditions of the vehicle.

(15) Assist the driver in backing or other difficult maneuvers when an assistant driver is not available.

(16) Ensure the driver does not interrupt the flow of civilian traffic by making sudden halts, unauthorized U-turns, or other unauthorized driving maneuvers on the road.

(17) Ensure the driver complies with road signs and speed limits as dictated by road conditions.

(18) Ensure highway warning devices are properly displayed when the vehicle stops on or beside the traveled portion of the roadway.

(19) Post personnel and warning triangles to warn approaching traffic when the vehicle is disabled or halted in a location that obstructs traffic.

(20) Ensure the driver maintains a safe interval between vehicles.

(21) Ensure tire chains are used when needed.

(22) Ensure the driver's vision is not obstructed by ice, snow, dirt, personal radios, or other items in the vehicle.

(23) Enforce antenna tiedown requirements.

(24) Comply with convoy march discipline when vehicles are halted.

(25) Ensure that vehicle safety items are serviceable and used as required.

(26) Ensure that the driver complies with traffic laws and unit standing operating procedures.

(27) Be knowledgeable and execute provisions of USAREUR Regulation 190-1, paragraph 4-7, in the event of an accident.

b. The senior occupant may replace the driver or assistant driver to execute any responsibility listed in a above. The senior occupant must be licensed to operate the vehicle if driving is deemed necessary.

B-3. LIABILITY

If the senior occupant of a military vehicle fails to provide adequate supervision, he or she may be subject to disciplinary action and monetary liability for vehicle damage.

APPENDIX C
MOTOR VEHICLE ACCIDENT PREVENTION MEASURES

C-1. PURPOSE
This appendix provides guidelines for commanders for motor vehicle accident prevention measures for assigned personnel.

C-2. METHODS OF CREATING INTEREST

a. Publish safety articles regarding local problems in unit newspapers.

b. Obtain and distribute pamphlets, handouts, and magazine articles (authorized for reprinting) about weather and traffic problems.

c. Post photographs of local accidents or accidents that have occurred in the unit. Local military and civilian law enforcement agencies may be able to provide photographs.

d. Erect a sign at the entrance of each installation or motor pool showing the number of accident-free days or miles of that activity. These signs may compare current and past accident statistics.

e. Use local popular music groups to present traffic safety programs built around parodies of current musical hits. Use slides between skits to present information about the local safety problem. Assemble groups in theaters to reach large audiences. Limit programs to 1 hour or less.

C-3. EDUCATION PROGRAMS

a. Conduct winter driving classes before winter and repeat them as necessary. A suggested outline for a 2-hour winter driving orientation is in appendix D.

b. Obtain films and prepared safety talk kits (flannel board) from supporting audiovisual centers.

c. Conduct special classes on traffic safety before holidays and extended weekends to target persons who will take extended trips.

d. Identify and publicize hazardous driving areas near the unit.

e. Contact local police officials to request assistance in providing instruction on local traffic laws and ordinances.

C-4. INCENTIVE AND AWARD PROGRAMS

a. Conduct safety contests (for example, slogan, poster, suggestion contests) and award prizes to winners.

b. Send letters of congratulation to commanders whose units have no accidents during holidays.

c. Establish a competitive program between units for the best traffic safety program. Give appropriate awards to winners.

d. Publicize accounts of traffic violations by unit personnel, including punitive actions taken by civil or military authorities, in unit newspapers. Do not publicize traffic violations, however, until after civil and military authorities have completed their actions. Consult the servicing judge advocate office in questionable cases.

e. Prepare letters from the unit commander to drivers who have completed their tours without traffic accidents or moving traffic violations. These letters can serve as proof of the soldier's driving abilities under adverse driving conditions.

f. Identify and publicize soldiers who drive without accidents during their tours (2 to 3 years) in the command. Interview these soldiers for the Armed Forces Radio and Television Service or for feature articles in local papers.

g. Provide incentives for safe driving performance by presenting awards as prescribed in AR 600-8-22 or in this regulation, appendix E.

C-5. OTHER ACTIONS

a. Inform personnel through bulletin notices, newspaper articles, and posters of the requirement to use seatbelts in their POVs.

b. Consider a unit's safety effort when preparing officer evaluation reports and recommendations for promotion of enlisted personnel.

c. Ensure that windows of military vehicles are free from ice and snow and that occupants' seatbelts are fastened before vehicles are dispatched from transportation or unit motor pools.

d. Ensure the safety of personnel traveling on passes or leave. Check whether or not persons applying for passes or leave are in good physical condition and their POVs are in safe operating condition. When necessary, individuals can be refused passes or leave to prevent unsafe travel. Pass or leave slips may be annotated to show these checks were made.

e. Provide swift and appropriate corrective action as authorized in USAREUR Regulation 190-1.

f. Establish a procedure to assist drivers who do not consider themselves in proper physical condition to reach their destination safely.

g. Establish a plan for obtaining and disseminating information about weather and road conditions. Encourage limited driving during hazardous driving conditions.

h. Motivate personnel to maintain their POVs in safe operating condition.

(1) Establish motor vehicle hobby shops. Permit personnel to use the facilities to maintain their vehicles according to the standards for vehicle registration.

(2) Provide qualified motor pool personnel to inspect a car for unsafe conditions when USAREUR personnel request assistance in buying a used car.

i. Support host community efforts for safety campaigns. Contact local community officials and ask to be advised about local safety efforts.

j. Require that company or battalion commanders counsel persons who are cited for moving traffic violations or involved in traffic accidents. This counseling and assessment of traffic points will be annotated on the driver's record (DA Form 348 (Equipment Operator's Qualification Record (Except Aircraft))).

k. Establish a safe driving week each quarter. Include special safety talks and films with command emphasis on having no AMV or POV accidents during the week.

l. Require, for a specified time, that a noncommissioned officer (NCO) be an assistant driver in military vehicles dispatched off post after a military vehicle of the unit has been involved in an accident.

m. Remind officers and NCOs through unit newspapers, daily or weekly bulletins, or other media to report unsafe driving behavior by AMV drivers.

n. Establish roadway spot checks to detect unsafe practices of drivers who are not directly supervised. Stop a driver who is driving unsafely and require him or her to return the vehicle to the motor pool. Do not stop the driver, however, if this will create a hazard to other drivers.

o. Establish an AMV accident review board, when appropriate. The board will:

(1) Consist of assigned drivers and a representative of the local works council under the direction of the officer in charge (OIC) or noncommissioned OIC of the motor pool.

(2) Analyze AMV accidents involving assigned or other drivers and recommend methods for preventing similar accidents. If possible, the board should interview the drivers of vehicles involved in accidents.

p. Use symbols or phrases on trip tickets to encourage safe driving (for example, stamp the trip ticket "Safe Driver" or "No Accidents"). These markings effectively influence driver behavior.

q. Periodically post extracts of host country traffic laws on bulletin boards to inform drivers of current traffic regulations.

r. Provide foldout or strip maps of the areas to be traveled to drivers on other than local dispatch.

s. Establish a unit "Hall of Fame" featuring photographs or names of soldiers who remain free of POV accidents and arrests.

t. Conduct and publicize a search for the unit's safest driver. Let all personnel in the unit nominate their choices, stating in writing why their nominees are the safest drivers. Check the provost marshal record closely before publicizing winners.

u. Assemble on the parade ground and photograph every available soldier in the unit whose past 12 months of driving in USAREUR have been free of accidents and arrests. Publicize this group as soldiers who have safely met the hazards of driving in Europe. Credit them for causing no insurance losses. Have the commander acknowledge their contributions to the Army image.

APPENDIX D
WINTER DRIVING ORIENTATION

D-1. PURPOSE
This appendix provides guidance for conducting winter driving orientation (WDO).

D-2. GENERAL

a. Task. The task is to familiarize military and civilian personnel licensed to operate Army motor vehicles (AMVs) with the hazards of winter driving and safe driving principles and techniques.

b. Conditions. WDO will be conducted orally with instructors under supervised conditions.

c. Standard. Attendees will identify and describe techniques necessary for safe driving under adverse conditions (for example, ice, snow, fog, rain or freezing rain, shorter daylight hours).

D-3. INTERMEDIATE TRAINING OBJECTIVES
There are no intermediate training objectives.

D-4. ADMINISTRATIVE INSTRUCTIONS

a. Training Time. The deputy community commander or unit commander will designate when training will be given.

b. Training Location. WDO will be conducted in a classroom.

c. Training Type. WDO will be conducted in conference style.

d. Who Will Be Trained. Personnel licensed to operate AMVs will be trained. WDO will be made available to personnel licensed to operate privately owned vehicles (POVs).

e. Principal and Assistant Instructors. Instructors will be assigned.

f. Training Aids and Equipment. Vugraph, overhead projector, screen or television set, slides, films, and videos will be used.

g. References. The basic regulation, appendix A, lists references.

D-5. SEQUENCE OF EVENTS

a. Introduction. State the objective and purpose.

b. Explanation. Conduct conference by explaining and discussing techniques used for safe driving under adverse conditions. The suggested outline for WDO is in figure D-1.

c. Review. Summarize main points and answer questions. Give closing statement and provide feedback.

D-6. SAFETY RESTRICTIONS
There are no safety restrictions.

D-7. ADDITIONAL COMMENTS AND INFORMATION
The instructor will annotate the operator's OF Form 346 (US Government Motor Vehicle Operator's Identification Card) and DA Form 348 (Equipment Operator's Qualification Record (Except Aircraft)) with a stamp or statement, "Winter Driving Orientation, (Year)" to indicate training was received.

APPENDIX E
USAREUR SPECIAL ACHIEVEMENT AWARDS FOR SAFE DRIVING

E-1. PURPOSE
This appendix provides policy and procedures for awarding special achievement awards (SAAs) at unit level for safe driving in USAREUR.

E-2. APPLICABILITY
USAREUR SAAs for safe driving apply to any Department of the Army civilian (DAC) or local national (LN) employee who:

a. Operates USAREUR Army motor vehicles (AMVs) in the course of official duty.

b. Is eligible to receive cash awards according to AR 672-20.

E-3. GENERAL

a. USAREUR SAAs provide a safe driving incentive by rewarding outstanding safe performance. Safe drivers conserve resources in AMV operations.

b. The cash award program for safe driving in USAREUR will conform to AR 672-20 to ensure equitable treatment of USAREUR personnel.

E-4. AWARD CRITERIA

a. To be eligible for an award, the driver must drive at least 10,000 miles without:

(1) A preventable traffic accident (an accident in which the operator did everything a reasonable person would have done to avoid difficulties).

(2) A finding by the commander, supervisor, or a court, that the nominee committed a moving traffic violation.

(3) An assessment of traffic points for violations listed in UR 190-1.

b. The base of 10,000 miles is a requirement for award eligibility. Additional accident-free performance exceeds the standard for satisfactory performance and may be rewarded as special achievement.

c. After attaining the accident-free base of 10,000 miles, the driver's additional safe driving mileage may be rewarded each year in cash. The applicable standard rate for distance is $3 per 1,000 miles ($.003 per mile). This standard rate may be increased for continuous periods of accident-free or incident-free driving performance, for complex operations, or both.

d. The safe operation of certain kinds of AMVs, a continuous record of accident-free or incident-free mileage, or both, deserve increased special achievement awards. The standard rate in c above may be increased as follows:

(1) By 50 percent (an additional $1.50 per 1,000 miles) for the following complex vehicle operations:

(a) Heavy truck (5-ton or more).

(b) Multiaxle vehicle (three or more axles) or any type of trailer.

(c) Bus with nine or more passengers (incl schoolbuses).

(d) Dangerous cargo (for example, ammunition, explosives, flammables).

(e) Emergency vehicle (for example, ambulance, fire).

(2) By an additional 50 percent (an additional $1.50 per 1,000 miles) for a continuous safe driving record of between 110,000 and 510,000 consecutive miles, including the required accident-free base.

(3) By an additional 100 percent (an additional $3 per 1,000 miles) for a continuous safe driving record of over 510,000 consecutive miles, including the required accident-free base.

e. The total distances driven may be compiled from daily trip tickets or other reliable sources such as daily logs. The mileage will be maintained on permanent individual logs and records certified by the responsible supervisor or commander.

f. An individual's safe driving record for AMVs will be broken by any of the criteria in a(1) through (3) above.

g. Following the incident that breaks the safe driving record, the driver must compile a new base of 10,000 accident-free miles.

h. Figure E-1 lists potential awards.

E-5. SPECIAL AWARDS

a. A $200 bonus in addition to the regular awards (para E-4 and fig E-1) may be awarded each driver who drives 500,000 accident-free miles.

b. A $500 bonus in addition to the regular awards may be awarded each driver who drives 1 million accident-free miles.

E-6. NOMINATION FOR CASH AWARDS

a. Nominations for safe driving cash awards for DAC and LN drivers will be submitted and processed according to AR 672-20, chapter 4. Nominations must be supported by reliable data. When acceptable to the paying finance office or Office of Defense Cost, commanders may attach a list of eligible personnel to 1 copy of DA Form 1256 (Incentive Award Nomination and Approval) to simplify nominations. The list will provide the necessary information for each person nominated for an award, including name, mileage accrued, and the amount of the recommended cash award.

b. To confirm eligibility, nominating commanders will verify DA Form 1256 after verifying the driving record of each person nominated.

c. Cash awards made according to AR 672-20 will be given only for safe driving by USAREUR personnel in USAREUR AMVs. Safe driving records compiled outside USAREUR (for example, another major Army command, Government agency, industry) will not be considered for eligibility under this regulation.

E-7. CERTIFICATE OF MERIT FOR SAFETY

AE Form 385-55A (Certificate of Merit for Safety) will be awarded to any company-size unit (to include battery, troop, headquarters and headquarters detachment) that successfully completes a fiscal year (FY) without a soldier convicted of, or administratively determined to have been, driving while intoxicated (DWI) or driving under the influence (DUI) of intoxicating beverages or drugs.

a. Commanders will verify that soldiers under their command, from 1 October of the preceding year through 30 September of the year applying, who have USAREUR-registered privately owned vehicles, did in fact, complete the FY without being convicted of, or administratively determined to have been, DWI or DUI. This authority may not be delegated.

b. Memorandum requests will be submitted, through the chain of command, to the Commander, USAREUR/7A, ATTN: AEAGA-S, Unit 29351, APO AE 09014, to arrive not later than 30 December. The request must clearly state the complete name and address of the requesting unit and the FY without an alcohol-related incident.

APPENDIX F
TRACKED VEHICLE SAFETY

F-1. PURPOSE
This appendix provides safety guidelines for operating tracked vehicles.

F-2. SAFETY GUIDELINES
Tracked vehicles will be operated as follows:

a. Each tracked vehicle will have a track commander (TC), who will ride in the commander's hatch. The TC should be experienced, competent, mature, and licensed to operate the vehicle.

b. Operators will not start tracked vehicles unless the portable and fixed fire extinguishers are present and in operating condition.

c. The intercom must be operational and in use. The movement of a tracked vehicle without a TC and a working intercom or dismounted guide is prohibited.

d. Before lowering or raising ramps, the operator will check the rear area for clearance and sound the horn twice. Defective ramps will be marked "Free Fall Ramp" on the ramp and on the sides of the vehicle. Ramps will be secured using the vehicle tow chain.

e. Operators will fasten open hatch covers securely with the positive safety pin to avoid accidental closing during movement of the track.

f. Personnel should not wear rings, bracelets, or watches.

g. Personnel in tracked vehicles will wear protective headgear. The crew will wear combat vehicle crewman (CVC) helmets.

h. Persons exposed to eye hazards will wear eye protection.

i. Personnel in tracked vehicles, except those wearing a CVC helmet, will wear ear protection.

j. Drivers, TCs, and guides will be proficient in the use of hand and arm signals.

k. Personnel will not position themselves between a track and another track or fixed object while the engine is running or being slaved (started with jumper cables).

l. The longitudinal distance between tracks when engines are idling will not be less than 6 meters.

m. Personnel riding in tracked vehicles will be cautioned to remain inside the vehicle if it starts to roll over.

n. Personnel will ride with their bodies completely inside the vehicle. Personnel in hatches will not expose more than their head and shoulders.

o. Smoking in tracked vehicles, or within 16 meters of tracked vehicles, is prohibited.

p. Riding on top of tracked vehicles is prohibited.

q. Seated persons will wear seatbelts, when available.

r. When vehicles and troops on foot are training together during darkness, foot troops, drivers, and TCs will be notified of the moving vehicles in the area and cautioned about the dangers.

s. Personnel will not rest or sleep under tracked vehicles or within 16 meters of tracked vehicles.

t. Drivers will move tracked vehicles in vehicle parks or bivouac areas only when a dismounted guide assists. When visibility is reduced, guides will have a portable light. The vehicle commander, driver, and the dismounted guide will maintain visual contact at all times.

u. Drivers of tracked vehicles will stop at railroad crossings without electric signal lights or road guards and check the clearance in both directions before crossing.

v. Radio-equipped tracked vehicles operating near power lines will have the antenna tied down to ensure 3 meters of clearance from power lines.

F-3. TRAINING NEW DRIVERS

a. Commanders will adhere to the guidelines in US 1 to AR 600-55, Field Manual (FM) 21-17, Technical Manual (TM) 21-301, and TM 21-306 when selecting and training tracked vehicle drivers.

b. Students will not attempt convoy operations until they have demonstrated driving competency.

F-4. TRACKED VEHICLE LIGHTS AND MARKINGS

Tracked vehicles operating singly (with escort) or in convoy on public roads in the Federal Republic of Germany will be:

a. Equipped with rotating or flashing amber lights.

b. Marked appropriately with retroreflective tape to identify the corners of the vehicle according to UR 55-1.

APPENDIX G
CRITERIA FOR BUILT-UP VEHICLES

G-1. PURPOSE
This appendix establishes criteria for constructing and using built-up vehicles.

G-2. POLICY
Built-up vehicles may be used only to secure, store, and transport tools, repair parts, supplies, and high-value items. Only the following vehicles may be built up:

a. 2 1/2-ton and 5-ton cargo trucks.

b. High mobility, multiwheeled vehicles.

c. Commercial utility cargo vehicles.

d. 1 1/2-ton trailers.

G-3. CONSTRUCTION

a. Shelters for 2 1/2-ton and 5-ton cargo trucks will not be higher than 2 meters (7 feet) above the cargo bed of the truck.

b. Shelters for 1 1/2-ton trailers will not be higher than 1.8 meters (6 feet) above the bed of the trailer.

c. The weight of a shelter plus the loaded cargo will not exceed the authorized cross-country weight of the vehicle.

d. The authorized cross-country weight of each axle will not be exceeded.

e. The weight on the trailer tongue should be approximately 10 percent of the gross vehicle weight.

f. Shelters will:

(1) Be constructed of plywood or sheet metal.

(2) Fit inside the cargo bed of the truck or trailer and not extend over the vehicle cab.

(3) Not hinder the opening and closing of tailgates.

(4) Be securely fastened to trucks or trailers.

g. Drilling through cross members or vehicle frames to install or anchor shelters is prohibited.

h. If shelves are installed in a built-up vehicle, a load plan must be included to ensure the center of gravity is not significantly altered.

i. Plans for the installation of heaters or lights must be included with requests for approval of built-up vehicles.

j. Shelters will be painted to meet the color and pattern (camouflage) of the vehicle.

G-4. USE

a. Personnel will not ride or sleep inside the built-up portion of vehicles.

b. Logistics transportation personnel will inspect built-up vehicles for compliance with this regulation before they are put into service and during scheduled maintenance.

c. Logistics transportation personnel will file records of approval for use of built-up vehicles and inspections with vehicle records.

d. Technical assistance with the construction of built-up vehicles may be obtained from the local logistics assistance representative of the United States Army Tank-Automotive Command.

APPENDIX H
USAREUR MILITARY VEHICLE CONSPICUITY PROGRAM

H-1. PURPOSE
This appendix explains how to use military vehicle delineators (MVDs) and military vehicle delineator plates (MVDPs) in USAREUR. Use of MVDs and MVDPs will help prevent rear-end collisions by making military vehicles conspicuous.

H-2. APPLICATION
The policy in this appendix applies to every tactical tracked, wheeled, and trailer vehicle in USAREUR. Only the retroreflective markings specified this appendix will be used on the rear of vehicles operating in USAREUR.

H-3. REQUIREMENTS

a. Policy. Each tactical tracked, wheeled, and trailer vehicle will have at least two 30- by 30 centimeter MVDs or MVDPs affixed to the rear of the vehicle, regardless of the size of the vehicle.

b. Other Retroreflection Requirements. Oversized and special use vehicles will have military conspicuity stripes (MCSs) affixed to the entire width of the rear of the vehicle. These MCSs will be made from diamond-shaped, prismatic-lens, retroreflective sheeting. Convoy safety escort vans and tractors operating without trailers are examples of special use vehicles.

H-4. MVD and MVDP DESCRIPTION

a. The MVDs is a type 3900G diamond-shaped, prismatic-lens, retroreflective sheeting that makes vehicles conspicuous day and night. This sheeting causes the lights from a following vehicle to reflect back to the trailing driver efficiently. This gives the rear motorist a clear delineation of the boundaries of the vehicle in front.

b. Since red is the universal sign of danger, the normal driver reaction is to drive either to the right or left, rather than straight ahead. This tendency is reinforced by the arrow shape of the red design, which points the following driver away from the center of the military vehicle. Yellow, the caution color, is used to contrast with the red and catch the following driver's attention well in advance.

H-5. ORDERING

a. MVDs, MVDPs, and MCSs are listed in volume 10 of the International Federal Supply Schedule (IFSS) and will be administered by the General Services Administration (GSA). UR 715-2, paragraph 8.404, gives authority for units to use the IFSS.

b. Units will use the nomenclatures in table H-1 to order MVDs, MVDPs, and MCSs through the local procurement section of their supply support activity (SSA). The SSA will use the IFSS to complete DA Form 3953 (Purchase Request and Commitment) (PR&C). The PR&C will be sent to the servicing regional contracting office for acquisition from the IFSS source. Use of the incremental delivery order benefit listed in the IFSS is encouraged. This method is cheaper because it eliminates the recurring administrative costs of redundant procurement.

H-6. PLACEMENT
Specific placement locations for the more common Army tactical vehicles are shown in the MVD description and mounting instructions at the end of this regulation.

a. Two MVDs or MVDPs will be mounted on the rear of each vehicle, as close to the outside corners as possible, with the red portion to the inside, preferably within 2 meters of the ground. The absence of fenders may require mounting the MDV on the back of the cab. Mudflap mounting is possible only with the use of MVDPs and bolts.

b. Because MVDs that adhere directly to vehicle surfaces cannot be removed for repositioning, units should consider the following options:

(1) MVDs that can be nonremovably affixed to the vehicle surfaces. The vehicle surface where the MVDs are to be affixed must be clean and dry and free of any surface contaminants (such as oil or grease).

(2) MVDPs that can be affixed to vehicle surfaces to be nonremovable or removeable by suing sheetmetal screws, bolts or rivets. Nylon washers should be used to prevent damage to the sheeting.

(3) Type SJ3531 dual lock 400 fasterners, which have an acrylic pressure-sensitive adhesive (PSA) for adherence to surfaces treated with military polyeurethene paint, if quick removability is needed or desired. The vehicle surface where the SJ3531 dual lock 400s will be affixed must be clean, dry, and free of surface contaminants (such as oil or grease).

H-7. MAINTENANCE

Delineators and other vehicle reflective systems will be cleaned with clear water before vehicles depart an installation or encampment. Vehicle maintenance rest stop instructions to drivers of tactical wheeled and tracked vehicles will include wiping delineators and other lighting and reflective devices clean of road mud or dirt.

APPENDIX I
INCLEMENT WEATHER ROAD CONDITION STATUS POLICY

SECTION I
ROAD CONDITION STANDARDS

I-1. GREEN
Unrestricted vehicle dispatches are authorized. Ideal road, visibility, and temperature conditions exist. Drivers will observe normal precautions and speed limits (table I-1).

Table I-1 Road Condition Status Characteristics

Road Condition	Road Surface	Snow	Ice	Snow Depth	Visibility	Temperature
Green	Dry	None or blowing powder	None	None	More than 50 meters	Above 35F (+2C)
Amber	Wet	*Packed*Slush	*Patches*Black ice*Slush	*Less than 4 inches	*Between 20 and 50 meters	Between 30F (-1C) and 35F (+2C)
Red	*Flooded	*Drifting	*Sheet ice	*Between 4 and 8 inches	*Between 15 and 20 meters	Between 10F (-12C) and 30F (-1C)
Black	*Heavilyflooded	*Heavy drifting	*Extreme sheet ice	*More than 8 inches	*Less than 15 meters	Less than 10F (-12C)

*When one or more of the road conditions marked with an asterisk are noted, the corresponding road condition status must be declared.

I-2. AMBER
Ideal road, temperature, and visibility conditions do not exist (table I-1). If a road condition marked with an asterisk in the Amber category is reported, commanders (basic reg, para 3-9) will declare Amber road conditions. Increased driving times, hazardous road conditions, and driver experience will be considered in dispatching vehicles under Amber conditions. Unit commanders (captains and above) will authorize dispatches under Amber conditions for their vehicles. Area support group (ASG), base support battalion (BSB), and area support team (AST) directors of public works (DPWs) or primary staff (S1, S2, S3, and S4) may authorize dispatches under Amber conditions for their vehicles.

I-3. RED
Only mission-essential and emergency-essential vehicle dispatches are authorized. Road, temperature, and visibility conditions are equal to or worse than those noted in table I-1. If one or more of the conditions marked with an asterisk in the Red category are reported, commanders (basic reg, para 3-9) must declare road conditions Red. The dispatch record for mission- and emergency-essential vehicles will be marked "mission- and emergency-essential." Battalion-level commanders, including BSB commanders, may authorize dispatch of mission-essential vehicles. AST commanders may authorize dispatch of mission-essential vehicles to operate in the local AST area. Directors of DPWs and chiefs of building and grounds and operation maintenance may approve mission-essential dispatches during Red road conditions to provide emergency support and for snow and ice removal. A risk assessment will be completed before dispatch.

NOTE: Drivers of military vehicles passing through BSBs that have declared Red road conditions should contact their chain of command and evaluate the risk of continuing the mission. Weather and road conditions will be part of all mission risk-management decisions.

I-4. BLACK
Only emergency-essential vehicle dispatches are authorized. Road, temperature, and visibility conditions are equal to or worse than those noted in table I-1. If one or more of the conditions marked with an asterisk in the Black category are reported, commanders (basic reg, para 3-9) must declare road conditions Black. The dispatch record for emergency-essential vehicles (police, fire, ambulance, and emergency engineer) will be marked "emergency-essential." Chiefs of appropriate offices (provost marshal, fire, medical activity, and DPW) may authorize dispatch of emergency vehicles. Brigade-level commanders, including ASG commanders, and above may authorize dispatch of their emergency vehicles. A risk assessment will be completed before dispatch.

NOTE: Drivers of military vehicles passing through BSBs that have declared Black road conditions should contact their chain of command and evaluate the risk of continuing the mission. Weather and road conditions will be part of all mission risk-management decisions.

SECTION II
WEATHER AND ROAD CONDITION DEFINITIONS

I-5. ROAD SURFACES

a. Dry. Road surfaces are not wet or damp from residual moisture caused by overnight accumulations of dew or ground fog, light rain, or drizzle.

b. Wet. A significant amount of moisture is standing on the roadway. The moisture is caused by moderate to heavy rain or melting snow. Wet conditions are characterized by the presence of puddles that require caution by vehicle operators.

c. Flooded. Flooded conditions are characterized by significant volumes of water on the road surface. The water is a result of rain or melting snow. Normal runoff capabilities are exceeded and a hazard to vehicle traffic exists.

d. Heavily Flooded. Heavily flooded conditions are characterized by excessive volumes of water on the road surface. Normal runoff capabilities are exceeded and some roads are closed, either by civilian or military authorities, to all vehicle traffic.

I-6. SNOW

a. Blowing Powder. Blowing powder is light snow that blows across the roadway. Blowing powder conditions are characterized by minor accumulations of snow during a light snowfall or in the early stages of a heavy snowfall.

b. Packed. Packed snow is characterized by major portions of the road being covered by a hardpacked snow surface. The road surface has been plowed, but not enough to remove snow completely, or vehicle traffic has compacted snow to form a hard surface on which vehicles can still be driven. Packed snow is a surface on which vehicle movement can be controlled by low speeds and proper caution.

c. Slush. Slush is a mixture of melting snow and water. Slush conditions are characterized by periods of rising temperatures or road salting operations following a snow accumulation. When slush is present, road surfaces are mostly free of significant accumulations of sheet ice or ice patches. Slush is a road condition factor when enough slush exists to require operators to exercise increased caution.

d. Drifting. Drifting is large accumulations of blowing snow cross road surfaces. Drifts or piles of snow completely block portions of the road that are sheltered from the wind while unsheltered portions are covered with less snow or may be completely free of snow.

e. Heavy Drifting. Heavy drifting conditions exist when drifts or piles of snow completely block roads and thoroughfares.

I-7. ICE

a. Patches. Ice patches are small areas of ice on otherwise ice-free roads. The ice requires operators to exercise increased caution. Ice patches usually accumulate in low-lying areas, on bridges, or under overpasses.

b. Slush. Ice slush generally is defined the same as snow slush (para I-6c). Slush usually freezes overnight when temperatures drop, causing a crystallized icy surface. Icy slush can cause steering difficulties.

c. Black Ice. Black ice covers the road surface with a thin coat of ice that greatly reduces tire traction over major portions of the road. Black ice is difficult to see because of its dull appearance. Black ice accumulates in shady spots, on bridge surfaces, and in low-lying areas.

d. Sheet Ice. Sheet ice is a solid ice accumulation covering large areas of the road. Vehicle tires do not make contact with the road surface on sheet ice. Traction on sheet ice is lost for 50 to 75 percent of the linear distance traveled in the area observed. Sheet-ice conditions generally follow periods of freezing rain and cause significant hazards to traffic.

e. Extreme Sheet Ice. Extreme sheet ice is a solid ice accumulation covering all areas of the road. Traction on extreme sheet ice is lost for more than 75 percent of the linear distance traveled in the area observed.

I-8. SNOW DEPTH

Snow depth should be measured in areas of the road not affected by the clearing or drifting actions of the wind.

I-9. VISIBILITY

Fog, heavy rain, heavy snow, or haze can affect a driver's range of vision. Choice of a condition status in table I-1 depends on a driver's ability to distinguish objects clearly (such as road-edge markers, parked vehicles, pedestrians, obstructions) using only natural light or the vehicle lighting systems. At night, visibility is the ability to determine the identity, direction of travel, and rate of travel of observed light sources at the distances indicated. As of 1 October 1997, a new German Law (50/50 Law) states that if visibility is reduced to 50 meters or less, the maximum speed limit is 50 kilometers per hour.

I-10. TEMPERATURES

Temperatures are used to determine the likelihood that observed conditions will stay the same, improve, or get worse.